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(71) Applicant (for all designated States except US): **SHOWA DENKO K.K.** [JP/JP]; 13-9, Shibadaimon 1-chome, Minato-ku, Tokyo 1058518 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **GOTO, Toshio**

[JP/JP]; 3-2110, Goshikien, Nisshin-shi, Aichi 4700105 (JP). **HORI, Masaru** [JP/JP]; 6-176, Fujitsuka, Nisshin-shi, Aichi 4700117 (JP). **NAGAI, Mikio** [JP/JP]; 1754-15, Hayashi, Komaki-shi, Aichi 4850805 (JP).

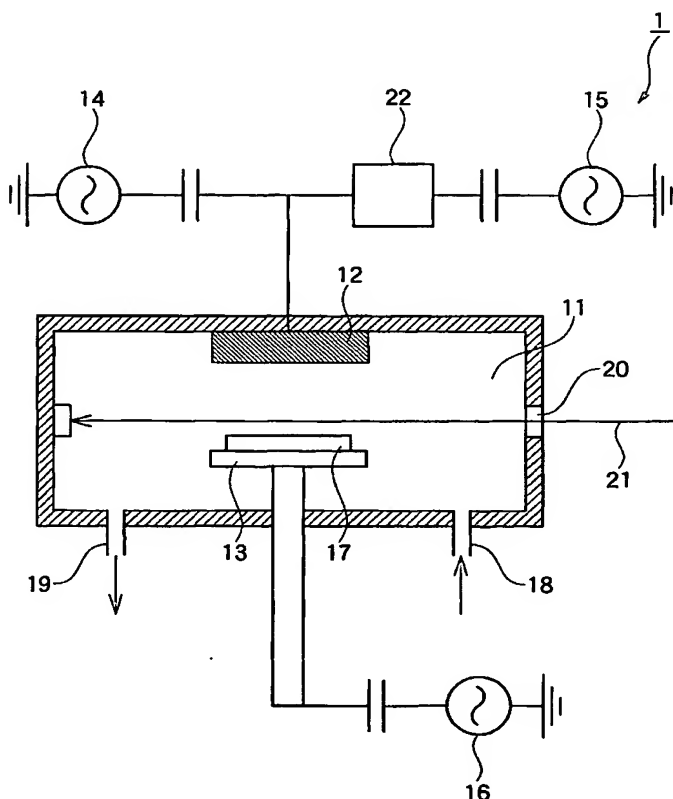
(74) Agent: **SUZUKI, Shunichiro**; S.SUZUKI & ASSOCIATES, Gotanda Yamazaki Bldg. 6F, 13-6, Nishigotanda 7-chome, Shinagawa-ku, Tokyo 1410031 (JP).

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(54) Title: **RADICAL GENERATING METHOD, ETCHING METHOD AND APPARATUS FOR USE IN THESE METHODS**



(57) Abstract: The method for generating radicals comprises: feeding F<sub>2</sub> gas or a mixed gas of F<sub>2</sub> gas and an inert gas into a chamber of which the inside is provided with a carbon material, supplying a carbon atom from the carbon material by applying a target bias voltage to the carbon material, and thereby generating high density radicals, wherein the ratio of CF<sub>3</sub> radical, CF<sub>2</sub> radical and CF radical is arbitrarily regulated by controlling the target bias voltage applied to the carbon material while measuring the infrared absorption spectrum of radicals generated inside the chamber.



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